

Barsun et al.

S/N: 10/737,377

REMARKS

Entry of the above-noted amendments, reconsideration of the Application, and allowance of all claims pending are respectfully requested. By this amendment, claims 1-5, 18-21, 23-23, and 26 are amended, claims 16-17 are canceled, and claims 29-30 are added. These amendments to the claims constitutes a bona fide attempt by Applicants to advance prosecution of the Application and obtain allowance of certain claims, and are in no way meant to acquiesce to the substance of the rejections. The specification has been amended to correct typographical error. Support for the amendments can be found throughout the specification (e.g., paragraphs 17, 20, and 32), figures (e.g., FIGS. 1-4 and 7), and claims (e.g., claim 20) and thus, no new matter has been added. Claims 1-15 and 18-30 are pending.

Allowable Subject Matter:

Claim 20 was objected to as being dependent upon rejected base claim 16, but was indicated as allowable if rewritten in independent form including all of the limitations of the base claim 16 and any intervening claims. Applicant gratefully acknowledges this indication of allowability, and has rewritten claim 20 in independent form including all of the limitations of the base claim 16 and the intervening claim 17. Claim 20 recites exactly the limitations of its original filing only now in independent form rather than dependent form.

An indication of allowance of independent claim 20 and its dependent claims 18-19, 21-22, and 29-30 is therefore respectfully requested

Specification Objection:

The disclosure is objected to because of the following informalities (Office Action, enumerated paragraph 1, page 2):

On page 9, line 8[,] and on page 10, line 11[,] the load point is numbered as 118. On page 10, lines 12-13 the fulcrum is numbered as 118. Also, according to the description on pages 9-10 the lever 102 acts on the lever 104, while in Fig. 3 the lever 104 is overlaying the lever 102.

Paragraph 38 presented herewith corrects typographical error by changing the "fulcrum 118" to the "fulcrum 122". In addition, Applicant notes, for example, the illustrative description of the fulcrum 122 as well as the levers 102 and 104 in enumerated paragraphs 32-33, 35-36, and 38, reproduced below, and FIGS. 1-4 and 7 of the Application.

Turning to FIG. 7, in another implementation of the apparatus 100, the load point 118 of the lever 104 is coupled with the effort point 112 of the lever

Barsun et al.

S/N: 10/737,377

102. The load point 118 is coupled with the effort point 112 such that an effort force applied by the user on the effort point 114 rotates the lever 102 about the load point 118. Next, the fulcrum 122 of the lever 102 engages the abutment portion 702 to stabilize the fulcrum 122. Subsequently, the lever 102 rotates about the fulcrum 122 to convert the effort force on the effort point 114 to a force on the effort point 112.

An illustrative description of exemplary operation of the apparatus 100 is presented, for explanatory purposes. At the first point in time, referring to FIG. 1, the lever 102 is not engaged with the heatsink component 106. The user wishes to secure the heatsink component 106 to the electronic component 108. At the second point in time, referring to FIG. 2, the user applies a lesser input force on the effort point 112. The effort point 112 receives the lesser input force such that the lever 102 rotates about the fulcrum 120 and the load point 116 engages the heatsink component 106.

...
At the third point in time, referring to FIG. 3, the user applies the lesser input force to the effort point 114. The effort point 114 receives the lesser input force such that the lever 104 rotates about the fulcrum 122 and the load point 118 engages the effort point 112 to become completely engaged at the fourth point in time (FIG. 4). The lever 104 converts the lesser input force on the effort point 114 to an intermediate force through the load point 118 on the effort point 112. The lever 104 converts the intermediate force to the greater output force such that the intermediate force is greater than the lesser input force, as will be appreciated by those skilled in the art. For example, a ratio of the intermediate force to the lesser input force is equal to three.

The user applies the lesser input force to the lever 102, which converts the lesser input force to the intermediate force on the lever 104. The lever 104 converts the intermediate force to the greater output force on the heatsink component 106. For example, the lever 102 and the lever 104 cooperate to form a compound lever where the lever 102 acts on the lever 104. The exemplary description herein is easily extendible to an implementation of the apparatus 100 that employs additional levers 104. Where the intermediate force is three times the lesser input force and the greater output force is four times the intermediate force, the greater output force is equal to twelve times the lesser input force. For example, the user can apply five pounds of force to the lever 102 and achieve sixty pounds of force on the heatsink component 106, as will be appreciated by those skilled in the art.

...
In another example, the load point 118 is coupled with the effort point 112. The fulcrum 122 engages the electronic component 108 to stabilize the fulcrum 122. For example, the fulcrum 122 engages the abutment portion 702 of the frame 126 to stabilize the lever 104. Other implementations of the apparatus 100 may comprise various arrangements of first class, second class, and/or third class levers. Exemplary types of first, second, and third class levers comprise seesaws, wheelbarrows, and mouse traps (not shown), respectively, as will be understood by those skilled in the art.

Withdrawal of the objection to the specification is therefore respectfully requested.

Barsun et al.

S/N: 10/737,377

Drawing Objection:

The Drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: because the lever 102 is shown without any fasteners, it is not clear how it can be held in the working position.

Applicant notes, for example, the illustrative description of exemplary fastener component 110 in enumerated paragraphs 19 and 39, reproduced below, and FIGS. 1-4 of the Application.

The levers 102 and/or 104 in one example comprise one or more fastener components 110. For example, the fastener component 110 comprises a latch and/or a lock. The fastener component 110 in one example secures the levers 102 and/or 104 from movement relative to the electronic component 108. In one example, the fastener component 110 engages the lever 102 with the electronic component 108. In a further example, the fastener component 110 locks the lever 102 in place against the heatsink component 106 and/or the electronic component 108.

...

Upon engagement of the lever 104, the user engages the fastener component 110 to secure the lever 104 in place. For example, the user slides a latch of the fastener component 110 over the lever 104 to secure the lever 104 from movement. The exemplary description herein is easily extendible to an implementation of the apparatus 100 that employs additional fastener components 110, as will be appreciated by those skilled in the art.

Withdrawal of the objection to the drawings is therefore respectfully requested.

Claim Rejections - 35 U.S.C. § 102:

Claims 1-19 and 21-28 are rejected under U.S.C. §102(e) as being anticipated by McHugh et al. (USP 6,574,109; "McHughs"). These rejections are respectfully, but most strenuously, traversed.

It is well-settled that there is no anticipation unless (1) all the same elements are (2) found in exactly the same situation and (3) are united in the same way to (4) perform the identical function. Since the Office Action's citations to the applied reference is missing at least one element of each of Applicant's independent claims, Applicant respectfully submits that the claimed invention is not anticipated by the Office Action's citations to the applied reference, as further discussed below.

Applicant respectfully submit that the Office Action's citations to the applied reference, with or without modification or combination, assuming, *arguendo*, that the modification or

Barsun et al.

S/N: 10/737,377

combination of the Office Action's citations to the applied reference is proper, do not teach or suggest one or more elements of the claimed invention, as further discussed below.

For explanatory purposes, Applicant discusses herein one or more differences between the Office Action's citations to the applied reference and the claimed invention with reference to one or more parts of the applied reference. This discussion, however, is in no way meant to acquiesce in any characterization that one or more parts of the Office Action's citations to the applied reference correspond to the claimed invention.

Applicant respectfully submits that the Office Action's citations to the applied reference do not teach or suggest one or more elements of the claimed invention. A careful reading of the Office Action's citations to the applied reference fails to teach or suggest, for example, the plurality of levers comprise the first lever and the second lever, wherein the first lever comprises the leaf spring or wireform lever that converts the lesser input force to the intermediate force on the second lever, wherein the intermediate force is greater than the lesser input force, wherein the second lever converts the intermediate force on the second lever to the greater output force, wherein the greater output force is greater than the intermediate force, wherein the second lever employs the greater output force for support of the heatsink component, as recited in Applicant's independent claim 1.

McHughs discloses (column 2, lines 49-53, and column 4, lines 6-23):

Referring to FIGS. 1-4, a retainer device in accordance with the present invention includes a retention module 50, a clamp 10, a crank holder 30 and a crank 40. The retainer device is used to attach a heat sink 20 to a CPU 62 mounted on a motherboard 60.

...
The clamp 10 is then rotated down toward the heat sink 20. The hook 22 thereby enters a space (not labeled) generally between the crank 60 and the base 36 of the crank holder 30 (see FIG. 6). The operation rod 46 of the crank 40 is then rotated upwardly and toward the heat sink 20. Because the crank 40 is engaged with the arcuate catch 34, the crank 40 drives the crank holder 30 to rotate toward the heat sink 20 in unison. When the crank holder 30 reaches a vertical orientation and abuts against stops (not labeled) of the first and second posts 52, 54, the crank 40 is released from engagement with the arcuate catch 34 and continues rotating until the operation rod 46 reaches a substantially horizontal position alongside the heat sink 20. Thereupon the operation rod 46 is locked in the locking portion 561 of the third post 56 (see FIG. 7). The pressing portion 42 of the crank 40 is at a lowest location, and resiliently presses the hook 22 downwardly. The clamp 10 thereby securely attaches the heat sink 20 to the CPU 62.

Barsun et al.

S/N: 10/737,377

For example, the crank 40 and crank holder 30 in McHugh fail to disclose, *inter alia*, the leaf spring or wireform lever. Simply missing from the Office Action's citation to McHugh is any mention of the plurality of levers comprise the first lever and the second lever, wherein the first lever comprises the leaf spring or wireform lever that converts the lesser input force to the intermediate force on the second lever, wherein the intermediate force is greater than the lesser input force, wherein the second lever converts the intermediate force on the second lever to the greater output force, wherein the greater output force is greater than the intermediate force, wherein the second lever employs the greater output force for support of the heatsink component, as recited in Applicant's independent claim 1.

So, the Office Action's citation to McHugh fails to satisfy at least one of the limitations recited in Applicants' independent claim 1.

Furthermore, the Office Action does not allege that the art of record provides any teaching, suggestion, or incentive for modifying the citation to McHugh to provide the claimed configuration.

For at least the reasons presented above with reference to claim 1, claims 1, 23, and 26 are believed neither anticipated nor obvious over the art of record. The corresponding dependent claims 2-15, 24-25, and 27-28 are believed allowable for at least the same reasons as independent claims 1, 23, and 26, as well as for their own additional characterizations.

Withdrawal of the § 102 rejections is therefore respectfully requested.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present Application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1-15 and 18-30.

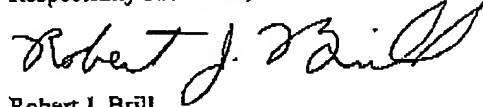
Applicant hereby authorizes charging of Deposit Account No. 08-2025 for any additional fees associated with entering the aforementioned claims.

Barsun et al.

S/N: 10/737,377

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,



Robert J. Brill
Registration No. 36,760
Direct Dial 773-832-4070
rjb@zpspatents.com

Dated: May 10, 2006
Attorney Docket No.: 200310970-1

P.O. ADDRESS:
Hewlett Packard Company
PO Box 272400, 3404 E. Harmony Rd.
Intellectual Property Administration
Fort Collins, CO 80527-2400